IN THE CLAIMS

1. (currently amended) A method for the determination of triglyceride individual molecular species composition of matter in a biological sample comprising:

subjecting the biological sample to lipid extraction to obtain a lipid extract;

subjecting the lipid extract to two dimensional electrospray ionization tandem mass spectrometry (ESI/MS/MS)[[;]] to generate a two dimensional plot representing molecular ions of the lipid extract on an x-axis and neutral loss scans of fatty acids of the lipid extract on a y-axis; and

~~determining a sensitivity of the molecular species; and~~

~~applying a correction factor to the sensitivity to produce the determination, wherein the correction factor is determined using a least square regressive non-linear curve fitting.~~

comparing peak heights for the molecular ions with that for an internal standard to identify and/or quantify the triglyceride molecular species.

2. (original) A method in accordance with Claim 1 wherein the lipid extraction is a chloroform lipid extraction.

3. (currently amended) A method in accordance with ~~Claim 2~~ Claim 1 wherein said biological sample includes at least one blood, serum, a tissue biopsy, feces, and urine.

4. (currently amended) A method in accordance with ~~Claim 3~~ Claim 1 wherein said biological sample is one of a mammalian tissue and a plant tissue.

5. (original) A method in accordance with Claim 4 wherein the mammalian tissue is human tissue.

6. (currently amended) A method in accordance with ~~Claim 5 wherein the determination comprises a finger print~~ Claim 1 further comprising determining a fingerprint profile of a ~~patient's~~ triglyceride molecular species.

7. (currently amended) A method in accordance with Claim 6 wherein said ~~finger print~~ fingerprint profile ~~comprises~~ represents the individual molecular species of a triglyceride composition of matter.

8. (currently amended) A method for the determination of triglyceride individual molecular species composition of matter directly from a lipid extract of a biological sample comprising:

subjecting said lipid extract to electrospray ionization tandem mass spectrometry (ESI/MS/MS)[[;]] to generate a two dimensional plot of molecular ions of the lipid extract versus neutral loss scans of fatty acids of the lipid extract; and

~~determining a sensitivity of the molecular species; and~~

~~applying a correction factor to the sensitivity to produce the determination, wherein the correction factor is determined using a least-square regressive non-linear curve fitting.~~

comparing peak heights for the molecular ions with that for an internal standard to identify and/or quantify the triglyceride molecular species.

9. (currently amended) A method in accordance with Claim 8 wherein said lipid ~~extraction~~ extract is obtained via a chloroform extraction.

10. (previously presented) A method in accordance with Claim 8 wherein said biological sample is one of a mammalian or a plant tissue.

11. (original) A method in accordance with Claim 10 wherein said mammalian tissue is human tissue.

12. (currently amended) A method in accordance with ~~Claim 11~~ Claim 8 wherein the biological sample is an aqueous human fluid sample subjected to at least one of centrifugation ~~and/or~~ and conventional column chromatography suitable for separation of lipoproteins to resolve triglyceride into different lipoproteins.

13. (currently amended) A method in accordance with ~~Claim 11~~ Claim 12 wherein the aqueous human fluid sample is selected from the group consisting of whole blood, blood serum, blood plasma, liver and urine.

14. (original) A method in accordance with Claim 13 wherein the lipid extract is obtained by extraction of said biological sample with chloroform.

15. (currently amended) A method in accordance with ~~Claim 14 wherein the triglyceride molecular species of the biological sample are determined by comparison with the triglyceride molecular species of a standard~~ Claim 8 wherein said internal standard includes a control sample ~~of triglyceride molecular species~~.

16. (currently amended) A method in accordance with ~~Claim 15 wherein the triacylglyceride molecular species of the biological sample are determined by comparisons of their ion peak intensities with the ion peak intensities of a standard control sample and iteratively deconvoluted and optionally normalized~~ Claim 8 further comprising iteratively deconvoluting and optionally normalizing the peak heights for the molecular ions.

17. (currently amended) A method in accordance with ~~Claim 16 wherein said determination includes deconvolution of the intensity~~ Claim 8 further comprising deconvoluting two dimensional intercept contours of the ~~triglycerides at their neutral loss products~~ neutral loss scans.

18-48. (canceled)